Revised: September 23, 1998

CARTOGRAPHIC REPRODUCTION TECHNICIAN

DEFINITION:

Under general supervision, to perform specialized and complex cartographic contact reproduction; and to perform related work.

DISTINGUISHING CHARACTERISTICS:

Cartographic Reproduction Technicians process all reproduction work done in the Mapping Section, Department of Public Works. Incumbents set up, expose, and develop all types of photographic films. This includes working with major contact reproduction equipment incorporating critical time frames and registration tolerances. This class must choose appropriate films and times for exposure and development and process them from start to finish as a routine function of their duties.

EXAMPLES OF DUTIES:

Sets up, exposes, and develops mylar contact reproduction films from multiple negative overlays; prepares color separation litho negatives for plate ready lithographic reproduction; works with and maintains the following equipment: large process cameras and enlargers, vacuum frames, pulsed xenon, mercury vapor lamps, point source lamps, and diazo printers and mini-lab; mixes solutions and test chemistry for film development processing.

MINIMUM QUALIFICATIONS:

Knowledge of:

- Contact reproduction equipment.
- Contact reproduction films and materials including line, half tone, and continuous tone films.
- Contact reproduction techniques including set-up, exposure, and development processes; screen tinting; pin registration.
- Drafting film qualities and characteristics as they affect reproduction processes.
- Color separation processes.
- Diazo printing processes.
- Projection reproduction.

General Knowledge of:

- Lithographic processes.
- Multiple overlay/negative preparation mapping systems.
- Graphic arts reproduction needs.

Skills and Abilities to:

- Read and interpret instruction regarding film exposure and development times, darkroom restrictions, and special processing instructions.
- Clean and maintain vacuum frames, diazo printers, and other reproduction laboratory equipment.

- Determine proper times for film exposure and development under complex circumstances, e.g., original, screen tint, and a "bump" mylar insert.
- Determine proper film type and light source for each particular job.
- Prepare color separation from initial key line etches to final litho negative preparation.

EDUCATION/EXPERIENCE:

Education, training, and/or experience which would likely demonstrate the knowledge, skills or abilities stated above. An example of qualifying experience is: at least two (2) years in developing mylar contact reproduction films from multiple negative overlays; preparing color separation lithographic negatives for plate-ready lithographic reproduction; mixing solutions and testing chemicals for film processing; and experience with use and maintenance of the following equipment: vacuum frames, pulsed xenon, mercury vapor lamps, point source lamps, diazo printers and mini-lab. Experience must include operation of large process cameras such as an Acti Copious-horizontal or Klimsch-vertical, and enlargers.

SPECIAL NOTES, LICENSES, OR REQUIREMENTS:

Working Conditions:

May be exposed to photoprocessing chemicals.

Physical Requirements:

Must possess visual acuity to distinguish colors.